

Name: _____

Date: _____

FOIL when $A \neq 1$ SLTN (version 111)

FOIL the expressions shown below:

1. $(4x - 7)(7x - 6)$

$$\begin{aligned} &(4)(7)x^2 + (4)(-6)x + (-7)(7)x + (-7)(-6) \\ &(28)x^2 + (-24)x + (-49)x + (42) \\ &28x^2 - 73x + 42 \end{aligned}$$

2. $(-7x + 5)(3x - 2)$

$$\begin{aligned} &(-7)(3)x^2 + (-7)(-2)x + (5)(3)x + (5)(-2) \\ &(-21)x^2 + (14)x + (15)x + (-10) \\ &-21x^2 + 29x - 10 \end{aligned}$$

3. $(-2x - 6)(8x + 7)$

$$\begin{aligned} &(-2)(8)x^2 + (-2)(7)x + (-6)(8)x + (-6)(7) \\ &(-16)x^2 + (-14)x + (-48)x + (-42) \\ &-16x^2 - 62x - 42 \end{aligned}$$

4. $(-9x + 4)(9x - 3)$

$$\begin{aligned} &(-9)(9)x^2 + (-9)(-3)x + (4)(9)x + (4)(-3) \\ &(-81)x^2 + (27)x + (36)x + (-12) \\ &-81x^2 + 63x - 12 \end{aligned}$$

5. $(2x - 2)(-7x + 8)$

$$\begin{aligned} &(2)(-7)x^2 + (2)(8)x + (-2)(-7)x + (-2)(8) \\ &(-14)x^2 + (16)x + (14)x + (-16) \\ &-14x^2 + 30x - 16 \end{aligned}$$

FOIL the expressions shown below:

6. $(-6x - 6)(-4x + 8)$

$$\begin{aligned} &(-6)(-4)x^2 + (-6)(8)x + (-6)(-4)x + (-6)(8) \\ &(24)x^2 + (-48)x + (24)x + (-48) \\ &24x^2 - 24x - 48 \end{aligned}$$

7. $(9x - 4)(2x - 6)$

$$\begin{aligned} &(9)(2)x^2 + (9)(-6)x + (-4)(2)x + (-4)(-6) \\ &(18)x^2 + (-54)x + (-8)x + (24) \\ &18x^2 - 62x + 24 \end{aligned}$$

8. $(-2x + 6)(4x + 6)$

$$\begin{aligned} &(-2)(4)x^2 + (-2)(6)x + (6)(4)x + (6)(6) \\ &(-8)x^2 + (-12)x + (24)x + (36) \\ &-8x^2 + 12x + 36 \end{aligned}$$

9. $(6x + 3)(-9x + 5)$

$$\begin{aligned} &(6)(-9)x^2 + (6)(5)x + (3)(-9)x + (3)(5) \\ &(-54)x^2 + (30)x + (-27)x + (15) \\ &-54x^2 + 3x + 15 \end{aligned}$$

10. $(-6x + 2)(4x - 9)$

$$\begin{aligned} &(-6)(4)x^2 + (-6)(-9)x + (2)(4)x + (2)(-9) \\ &(-24)x^2 + (54)x + (8)x + (-18) \\ &-24x^2 + 62x - 18 \end{aligned}$$